The following is a draft list of possible CALFED Stage 1 water quality measures that have been compiled based on input from stakeholders. These measures involve operations of the Projects that will reduce salinity (TDS, bromide, chloride) and organics - both precursors to DBPs. Source control and other regulatory measures are taken up in other CALFED forums.

Any and all ties to water supply/environmental impacts should be highlighted in each description. A sharing formula for environmental, water supply and WQ needs to be worked out and it clearly applies to almost all the NoName Group tools so far collected.

Brainstorming List of Actions:

1. Demand shifting: MWD, SCVWD, CCWD, smaller urbans?

2. Central Delta intake: Gain access to higher quality water.

3. Exchanges: Eastern Sierra water from Kern-Friant area provided to southern California urban areas in exchange for California Aqueduct water), other CVPIA exchanges proposed in 1997. NHI is working on the feasibility of rewatering the SJR through a series of exchanges. Possible exchange: CCSF gives water to SCVWD (they share or are planning a 30-50 cfs emergency intertie), SCVWD trades it SWP or CVP supply to some lower SJR exchange contractor who was taking water from the Tuolumne.

4. Utilization of Joint-Point for water quality:

5. San Luis dredging:

6. TOC production related to habitat: Is it a problem, can it be reduced?

7. Adjusted minimum Delta outflow in the fall:

8. Other ways of segregating urban and ag supplies south of the Delta: Creation of a second south of Delta reservoir, bifurcating the California Aqueduct south of San Luis.

9. Desalination:

10. Organic reduction of TOC in canals/reservoirs:

11. Delta water quality enhancement actions and possible impacts of proposed actions:

A. Hood diversion
B. Clifton Court Forebay change in ops with new screens
C. VAMP expansion
D. Alex's recycling proposal

12. Delivered water quality enhancement actions:

A. San Luis operations: Shifting of exports to times of high flow, circumventing San Luis for urban deliveries when quality in SLR is relatively poor, selective withdrawals from SLR could also help if an O'Neill bypass were built
B. SCVWD deliveries: urban supplies bypass San Luis Reservoir would be problematic for the Santa Clara Valley Water District, Pacheco Reservoir project (quality and supply), San Luis bypass.
C. Dumping bad water in wetter years

13. Enlarged and existing Los Vaqueros, could also work with Eastside and demand shifting

14. Delta Wetlands: Decrease in bromide concentration but increase in TOC?

15. Millerton and Pine Flat Water Transfers for Water Quality

A. *Flood control options* —When water is released form Friant into the San Joaquin River channel to accommodate flood control needs, some water could be diverted into the cross valley canal and delivered into storage in the MWD service area, Eastside Reservoir, groundwater basins, etc. This water should reduce the quantity of water MWD required from the delta later in the year.

B. Dry year options —When delta water quality is seriously degraded due to very low inflows, options might be exercised to purchase water and transport it for delivery to MWD.

C. Permanent trades —Development of a Mid Valley Canal or other physical facility to deliver delta water to the Friant Water Users could enable frequent trading of high quality drinking water in exchange for monetary considerations and guaranteed delivery of suitable water for agricultural uses.

D. Arvin Edison in lieu uses — MWD contract water from the delta could be stored in ground water basins for use by local users to enable the delivery of Millerton and Pine Flat water at other times to MWD.

Limitations on water quality measures: Generally speaking, in dry years there may be limited opportunities to move water around for quality enhancement for urbans with the given infrastructure if supply is not to be risked. Timing of transfers could be optimized for quality, though (capacity would be available).